

RADIATION DETECTOR WITH MICROPHOTONIC OPTICAL SWITCHES TO ROUTE LIGHT IN AN IMAGING SYSTEM

Abstract of Disclosure

An Radiation detector employs one or more arrays of microphotonic light transmission devices to selectively control the flow of light from different detection sites in a scintillator into an optical conduit. For example the microphotonic light transmission devices may be microelectromechanical steerable mirrors or light gates. Instead of employing a separate detector element to convert the light from each site into an electrical signal that is then switched into a data acquisition system, the present detector assembly switches the light into the optical conduit to the data acquisition system.